Response to Final Office Action Mailed 4/14/2011

Page 5 of 10

REMARKS

Status of Claims

Claims 1-21 are previously allowed. Claims 22-28 were previously or are now cancelled.

Claim 29 has been amended. Support for amended claim is found throughout the specification and at least in paragraphs [0017], [0055] and [0062-0063]. These amendments and cancellations of claims are made without prejudice.

Claims 1-21 and 29 are pending in this application of which claims 1-21 are allowed. Claim 29 is currently under prosecution and after entry of the foregoing amendment remains subject to examination in this application. No new matter has been added by ways of the foregoing amendment, nor is any new issue of patentability raised. The claim as amended is submitted to place the application for allowance. Accordingly, entry and consideration of this amendment is respectfully requested.

Interview

The undersigned representative would like to thank Examiner Swartz for providing the opportunity to discuss this application on June 30, 2011. A statement of the Substance of Interview as required under 37 C.F.R. §1.33(b) is filed on the even date.

Rejection of claims under 35 USC §112, lack of enablement

In the Action, claims 23-24 are rejected under 35 U.S.C. §112, First Paragraph, as allegedly being not enabled. Applicants traverse the rejection of claims 23-24. Reconsideration of these rejections in view of the remarks set forth herein is respectfully requested.

Applicants dispute the interpretation of the claims in the Action. However, without acquiescing to the asserted grounds of rejection and solely in an effort to expedite prosecution of the pending claims to allowance, Applicants have canceled claims 23-24 which moots the arguments stated in the Action. Reconsideration and withdrawal of the rejection of claims 23-24 is respectfully requested.

Response to Final Office Action Mailed 4/14/2011

Page 6 of 10

Rejection of claims under 35 USC §112, Second Paragraph

Claim 24 has been rejected as being indefinite because it lacks dependency to claim 1.

Cancellation of claim 24, moots the grounds for rejection of this claim. Reconsideration and withdrawal of the rejection of claim 24 is respectfully requested.

Rejections under 35 U.S.C. §102(b)

In the Action, claim 29 has been rejected under 35 USC §102 (b) as being anticipated by Khamar et al. (WO02/056898A2) because, according to the Action, the claim reads on a composition on one component, i.e., Mycobacterium w as taught by Khamar et al.

Without acquiescing to the asserted grounds of rejection and although Applicants dispute the interpretation of the art in the Action and solely in an effort to expedite prosecution of the pending claim to allowance Applicants have amended claim 29 which moots the arguments stated in the Action. As amended, claim 29 is directed to an adjuvant comprising *Mycobacterium* w and/or a constituent thereof wherein said adjuvant stimulates an immune response against a mixed or conjugated antigen or immunogen wherein the antigen or immunogen is not *Mycobacterium* w or a constituent thereof. Khamar et al., fails to teach an adjuvant comprising *Mycobacterium* w wherein the adjuvant stimulates an immune response against a mixed or conjugated antigen or immunogen.

For the reasons set forth above, reconsideration and withdrawal of the rejection of claim.

29 is respectfully requested.

CONCLUSION

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such action is hereby solicited.

Applicants believe that no additional fees are due, however, should Applicants be in error, authorization is hereby granted to charge attorney deposit account no. 03-2410, Order No. 106, for any fees.

A telephonic interview between the Examiner and Applicants' representative below is requested if any issues remain to resolve such issues and/or answer any questions the Examiner may have. Please call the undersigned attorney at 617-345-3691 if it facilitates the prosecution of this application leading to allowance.

Response to Final Office Action Mailed 4/14/2011

Page 7 of 10

Respectfully submitted, B. KHAMAR et al, Applicants

Date: July 7, 2011

Tel. No.: (617) 345-3691 Fax No.: (617) 345-3299

E-mail: shasan@burnslev.com

By: /Shahid Hasan /

Shahid Hasan, Ph.D. (PTO Reg. No. 67,231)

Attorney for Applicants Burns & Levinson LLP 125 Summer Street

Boston, Massachusetts 02111-1624

Response to Final Office Action Mailed 4/14/2011

Page 8 of 10

APPENDIX A

CLEAN COPY OF CLAIMS

- (Previously presented/Allowed) A composition comprising (i) Mycobacterium w and/or
 constituent(s) thereof as an adjuvant, (ii) an antigen, wherein the antigen is not
 Mycobacterium w and/or constituent(s) thereof, and (iii) a pharmaceutically acceptable
 carrier, wherein the composition results in an enhanced antigen associated immune response
 of the antigen compared to a composition where component (i) is absent.
- 2. (Previously presented /Allowed) A composition as claimed claim 1, further comprising other adjuvants.
- (Previously presented /Allowed) A composition as claimed in claim 1, wherein the Mycobacterium w is a killed Mycobacterium w.
- 4. (Previously presented /Allowed) A composition as claimed in claim 3, wherein the killed *Mycobacterium w* is killed by heat, radiation, preferably by autoclaving.
- (Previously presented /Allowed) A composition as claimed in claim 1, wherein the constituent(s) of Mycobacterium w is/are obtained by sonication.
- (Previously presented /Allowed) A composition as claimed in claim 1, wherein the constituent(s) of Mycobacterium w is/are obtained by high pressure cell fractionator.
- (Previously presented) A composition as claimed in claim 1, wherein the constituent(s) of Mycobacterium w is/are obtained by osmotic pressure gradient.
- (Previously presented /Allowed) A composition as claimed in claim 1, wherein the
 constituent(s) of Mycobacterium w is/are obtained from the Mycobacterium w by extraction.
- 16. (Previously presented /Allowed) A composition as claimed in claim 1, wherein the constituent(s) of Mycobacterium w is/are extracted from the Mycobacterium w by organic solvents.
- 17. (Previously presented /Allowed) A composition as claimed in claim 1, wherein the constituent(s) of Mycobacterium w is/arc extracted using solvents selected from the group consisting of chloroform, ethanol, methanol, acetone, phenol, isopropyl alcohol, acetic acid, urea,

Response to Final Office Action Mailed 4/14/2011

Page 9 of 10

and hexane.

18. (Previously presented /Allowed) A composition as claimed in claim 1 wherein the constituent(s) of Mycobacterium w is/are obtained by enzymatic treatment,

- 19. (Previously presented /Allowed) A composition as claimed in claim 1, wherein the constituent(s) of Mycobacterium w is/are obtained by using enzyme lyticase and/or pronase.
- 20. (Previously presented /Allowed) A composition as claimed in claim 1, wherein the constituent(s) of Mycobacterium w is/are substantially water insoluble.
- 21. (Previously presented /Allowed) A composition as claimed in claim 1, wherein the Mycobacterium w is a non-pathogenic, fast growing, cultivable, atypical Mycobacterium, with biochemical properties and growth characteristics substantially similar those belonging to Runyons group IV class of Mycobacteria.
- 22. (Previously presented /Allowed) A composition as claimed in claim 1, wherein the Mycobactertum w is urease negative, does not hydrolyse a compound of the formula below, does not produce niacin, and provides positive response to nitrate reduction test,

- 22. (Previously presented /Allowed) A composition as claimed in claim 1, wherein the Mycobacterium w and/or constituents thereof are mixed, formulated, conjugated, primed, fused and/or linked with the antigen.
- 23. (Previously presented /Allowed) A composition as claimed in claim 1, wherein the antigen is selected from the group consisting of one or more peptides, one or more polypeptides, one or more cells, one or more cell extracts, one or more polysaccharides, one or more polysaccharides, one or more polysaccharides, one or more carbohydrates, one or more proteins, one or more viruses, one or more viruses, and one or

Response to Final Office Action Mailed 4/14/2011

Page 10 of 10

more nucleic acids.

- 24. (Previously presented /Allowed) A composition as claimed in claim 1, wherein the antigen(s) is isolated from an infectious agent selected from the group consisting of virus, bacterium, fungus and parasites.
- (Previously presented /Allowed) A composition as claimed in claim 1, wherein the antigen(s) is a tumor associated antigen.
- (Previously presented /Allowed) A composition as claimed in claim 1, wherein the antigen is a tumor specific antigen.
- (Previously presented /Allowed) A composition as claimed in claim 1, wherein the antigen(s) is an allergen.

22-28. (Cancelled)

29. (Currently amended) An adjuvant comprising Mycobacterium w and/or a constituent thereof wherein said adjuvant stimulates an immune response against a mixed or conjugated antigen or immunogen wherein the antigen or immunogen is not Mycobacterium w or a constituent thereof.